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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s) : Alok Dev

Title of Invention : SILICON CARBIDE SCHOTTKY BARRIER DIODE
AND METHOD OF MAKING

Filed : June 28, 2001

Serial No. : ~~09/694,657~~ 09894084

Examiner: : FOONG, SUK SAN

Group Art Unit : 2823

Attorney Ref : US 010292

Mail Stop Non-fee Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

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REMARKS

This is responsive to the Office Action dated July 8, 2003, in which the Examiner holds his rejections to all the pending claims 1-8 and 18 as being obvious over the combinations of Lillienfeld et al (US Patent No. 5,087,322), Baliga et al (US Patent No. 5,635,412), Chen et al (US Patent No. 4,679,303), T.R. Cox et al (US Patent No. 3,567,508) and Thero et al (US Patent No. 5,612,232) under 35USC §103(a). The applicant respectfully traverses the rejections as explained in detail below.

In particular, the applicant does not agree with the assertion of the Examiner that the present invention as defined in claim 1 is obvious over combinations of Lillienfeld, Baliga, Cox and Chen. More specifically, the applicant does not agree with the assertion of the Examiner that the distinguishing feature of "implanting an edge termination layer into the wafer beneath the

surface of the insulating layer but not beneath the conductive material", which, as explained in the previous response of June 6, 2003 to the previous Office Action dated March 7, 2003, is not disclosed in any of Lillienfeld, Baliga and Cox, can be concluded by combining these previously cited patents with the newly cited Chen. Chen (303') discloses a method in fabricating high density MOSFET with field aligned channel stops. Though Chen's method comprises a step of forming a deep p+ dopant implant (channel stop 40) under the field oxide layer 24 (Fig. 6, col. 4, lines 51-60), the implant, however, is NOT an edge termination layer or has anything to do with an edge termination layer in a Schottky barrier diode as disclosed in the present invention. The applicant cannot find any suggestion or motivation of such combinations of the previously cited three patents with Chen. Therefore, the applicant does not believe that claim 1, with the above emphasized distinguishing feature, is obvious over the combinations of the cited patents. Moreover, this distinguishing feature is not disclosed in cited Thero either, thus, claim 1 is believed patentable. Similarly, claim 18 is believed also patentable which includes the above emphasized distinguishing feature too.

At least for the same reasons, dependent claims 2-8 are also believed patentable, as each of them includes all the limitations in claim 1.

Therefore, reconsideration with a view towards allowance is respectfully requested. The examiner is authorized to charge any shortages or credit any overpayments to our deposit account number 11-0223.

Respectfully submitted,

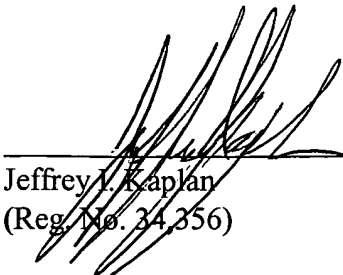
KAPLAN & GILMAN, L.L.P.

990 Route 9 North

Woodbridge, New Jersey 07095

Telephone (732) 634-7634

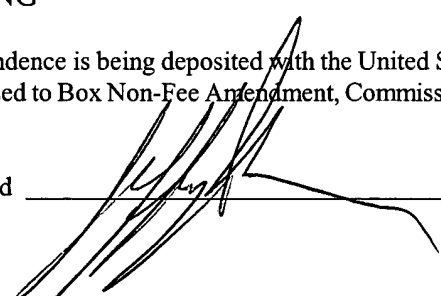
Dated: October 7, 2003



Jeffrey I. Kaplan
(Reg. No. 34,356)

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal service as first class mail, in a postage prepaid envelope, addressed to Box Non-Fee Amendment, Commissioner for Patents, Washington, D.C. 20231 on October 7, 2003.

Dated October 7, 2003 Signed  _____ Print Name Jeffrey I. Kaplan